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10/805,755	03/22/2004	Shinji Kuno	6639P011	1246

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EXAMINER	
UNELUS, ERNEST	
ART UNIT	PAPER NUMBER
2181	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/805,755	KUNO, SHINJI	
	Examiner	Art Unit	
	ERNEST UNELUS	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,18-20 and 22-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,18-20 and 22-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

RESPONSE TO AMENDMENT

Claim rejections based on prior art

Applicant's arguments filed 03/13/2009 with respect to the combination of Shimizu et al. (US pat. 6,609,977) and Witt (US pub. 2004/0109005) for the rejection of claims1-3, 18-20, and 22-36 have been fully considered moot in view of new rejection.

INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

1. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in **37 C.F.R. 1.63.**

INFORMATION CONCERNING DRAWINGS

Drawings

2a. The applicant's drawings submitted are acceptable for examination purposes.

OBJECTIONS TO THE CLAIMS

2b **Claim 19**, is objected to as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The remaining claim 20 is also objected by virtue of its dependencies on the independent claim.

As per **claim 19**, "An The apparatus comprising" of line 1 should be replace with ... 'An apparatus comprising' or as applicant sees feet.

REJECTIONS BASED ON PRIOR ART

Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-3, 18-20, and 22-36,** are rejected under 35 U.S.C. 103(a) as being unpatentable over Higashida et al. (US pat. 6,862,401) in view of Cloutier et al. (US pat. 5,847,771).

5. As per **claim 1**, Higashida discloses "An apparatus **(recording apparatus of fig. 2)** comprising:

a drive device **(hard disk 8 of fig. 2)**;

a communication bus **(the communication bus between the CPU 11 and the recording/reproducing control means 7 of fig. 2)**;

a first processor **(CPU 11)** coupled to the communication bus, the first processor to (i) receive a first stream data **(file management information 13)** including video data and audio data **(see col. 5, lines 45-60 and fig. 2 which discloses the CPU reading the file management information, which is an address of audio and visual data)** routed over the communication bus **(see fig. 2)**;

a second processor **(the recording/reproducing control means 7 of fig. 2)** provided with a second stream data **(see col. 4, lines 38-44, which discloses, "The recording/reproducing control means 7 is means which converts AV data which are outputted as an MPEG2 transport stream sent from the IEEE1394 I/F 6 into a recording format and records the data in the hard disk 8, or reads recorded AV data from the hard disk 8 and outputs the data after converting the data into an MPEG2 transport stream")** including video data and audio data that is received from the drive device without being routed over the communication bus **(see col. 4, lines 38-44 and fig. 2)**, the second processor to decode the second stream data to reproduce the second stream data **(see col. 4, lines 38-44, which discloses the recording/reproducing control means converting the data)** in accordance with an instruction sent from the first processor over the communication bus **(see col. 6, lines 54-65, which also discloses, "the CPU 11 instructs the recording/reproducing control means 7 to write AV data in a continuous subsequent recording block. ..... After converting the AV data into the recording format, the recording/reproducing control means 7 writes the AV data in the next recording block. In this manner, the AV data are written in the continuous recording blocks inside the hard disk 8 one after another, while the addresses of the recording blocks in which the AV data are being written are registered in the file management information 13 one after another")**.

but fails to specifically disclose a first stream data including video data and audio data and the first processor to decode a first stream of data.

Cloutier discloses a first stream data including video data and audio data **(see fig. 5)** and the first processor **(application processor 74 of fig. 5)** to decode a first stream of data **(see col.**

14, lines 7-8, which discloses, "Hence, the interactive application processor 102 decodes a subset of the MPEG2 video signal for display". See also col. 6, lines 21-24, which discloses the MPEG2 also being audio).

Higashida et al. (US pat. 6,862,401) and Cloutier et al. (US pat. 5,847,771) are analogous art because they are from the same field of endeavor of a broadcasting MPEG2 video/audio data to be display on a television monitor.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify a recording apparatus includes a recording device which records audio visual data (hereinafter referred to as "AV data") on a recording medium as taught by Higashida, and a programmable digital entertainment terminal (DET) for use in digital video program distribution networks and to systems and methods for providing picture-in-picture and picture-on-picture capabilities in digital video systems as taught by Cloutier.

The motivation for doing so would have been because Cloutier teaches, "In a preferred implementation of this apparatus, the application processor is a general purpose processor and is capable of executing different software or firmware applications in conjunction with the partial decompressing of the second stream"**(see col. 2, lines 37-41)** .

Therefore, it would have been obvious to combine Cloutier et al. (US pat. 5,847,771) with Higashida et al. (US pat. 6,862,401) for the benefit of creating the apparatus to obtain the invention as specified in claim 1.

6. As per **claim 2**, combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses "wherein the second processor is a stream processor" **(see col. 4, lines 38-40).**

7. As per **claim 3**, combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses wherein the first processor is a central processing unit (CPU) **(see fig. 2)**.

8. As per **claim 18**, combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses wherein the drive device is a hard disk drive **(see fig. 2).**

9. As per **claim 19**, Higashida discloses "An The apparatus **(system 50 of fig. 2)** comprising:

a drive device **(hard disk 8 of fig. 2)**;

a communication bus **(the communication bus between the CPU 11 and the recording/reproducing control means 7 of fig. 2)**;

a first processor **(CPU 11)** coupled to the communication bus **(see fig. 2)**;

a second processor **(the recording/reproducing control means 7 of fig. 2)** provided with a second stream data **(see col. 4, lines 38-44, which discloses, "The recording/reproducing control means 7 is means which converts AV data which are outputted as an MPEG2 transport stream sent from the IEEE1394 I/F 6 into a recording**

format and records the data in the hard disk 8, or reads recorded AV data from the hard disk 8 and outputs the data after converting the data into an MPEG2 transport stream") including video data and audio data that is received from the drive device without being routed over the communication bus **(see col. 4, lines 38-44 and fig. 2)**, the second processor to decode the second stream data to reproduce the second stream data **(see col. 4, lines 38-44, which discloses the recording/reproducing control means converting the data)** in accordance with an instruction sent from the first processor over the communication bus **(see col. 6, lines 54-65, which also discloses, "the CPU 11 instructs the recording/reproducing control means 7 to write AV data in a continuous subsequent recording block. ..... After converting the AV data into the recording format, the recording/reproducing control means 7 writes the AV data in the next recording block. In this manner, the AV data are written in the continuous recording blocks inside the hard disk 8 one after another, while the addresses of the recording blocks in which the AV data are being written are registered in the file management information 13 one after another")**.

but fails to specifically disclose the first processor to decode a first stream data including video data and audio data routed over the communication bus; and a network control unit coupled to the communication bus, the network control unit to transmit the first stream data via the communication bus.

Cloutier discloses the first processor **(application processor 74 of fig. 3)** to decode a first stream data including video data and audio data **(see col. 14, lines 7-8, which discloses, "Hence, the interactive application processor 102 decodes a subset of the MPEG2 video signal for display". See also col. 6, lines 21-24, which discloses the MPEG2 also being audio)** routed

over the communication bus **(72)**; and a network control unit **(NIM 50)** coupled to the communication bus, the network control unit to transmit the first stream data via the communication bus **(see fig. 5).**

Higashida et al. (US pat. 6,862,401) and Cloutier et al. (US pat. 5,847,771) are analogous art because they are from the same field of endeavor of a broadcasting MPEG2 video/audio data to be display on a television monitor.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify a recording apparatus includes a recording device which records audio visual data (hereinafter referred to as "AV data") on a recording medium as taught by Higashida, and a programmable digital entertainment terminal (DET) for use in digital video program distribution networks and to systems and methods for providing picture-in-picture and picture-on-picture capabilities in digital video systems as taught by Cloutier.

The motivation for doing so would have been because Cloutier teaches, "In a preferred implementation of this apparatus, the application processor is a general purpose processor and is capable of executing different software or firmware applications in conjunction with the partial decompressing of the second stream"**(see col. 2, lines 37-41)** .

Therefore, it would have been obvious to combine Cloutier et al. (US pat. 5,847,771) with Higashida et al. (US pat. 6,862,401) for the benefit of creating the apparatus to obtain the invention as specified in claim 19.

10. As per **claims 20 and 34,** combination of Higashida and Cloutier discloses "The apparatus according to claim 19," **[See rejection to claim 19 above]**, Cloutier further discloses wherein the control unit includes an IEEE 1394 processor" **(see Controller 68 of Fig. 4).**

11. As per **claim 22**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses, "wherein the communication bus is a Peripheral Component Internet (PC1) bus" **(see col. 13, lines 9-14).**

12. As per **claim 23**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Cloutier further discloses: a video bus **(82 of fig. 3)**; and a graphic controller **(interactive app. Processor 102 of fig. 5)** in communication with the first processor and the second processor **(see fig. 5)**, the graphic controller to convert the decoded first stream data into display video signals and to transmit the display video signals to the second processor over the video bus **(see col. 14, lines 7-8, which discloses, "Hence, the interactive application processor 102 decodes a subset of the MPEG2 video signal for display". See also col. 6, lines 21-24, which discloses the MPEG2 also being audio)**.

13. As per **claims 24 and 29**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 23," **[See rejection to claim 23 above]**, Cloutier further discloses wherein the second processor superposes the display video signals transmitted over the video bus on a video image generated from the decoded second stream data in accordance with display

information transferred from the first processor to the second processor over the communication bus **(see fig. 5 and col. 13, lines 38-43).**

14. As per **claims 25 and 30**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 24," **[See rejection to claim 24 above]**, Cloutier further discloses wherein the display information includes information designating a region in a drawing area and a transparency rate at the display video signals on a screen **(see col. 20 lines 36-56)**.

15. As per **claim 26**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses comprising: a television tuner **(STB 2, as discloses in col. 4, lines 9-18)** adapted to transmit a third stream data to the second processor for storage into a storage medium associated with the drive device **(see col. 4, lines 38-42, which discloses, "The recording/reproducing control means 7 is means which converts AV data which are outputted as an MPEG2 transport stream sent from the IEEE1394 I/F 6 into a recording format and records the data in the hard disk 8)**.

16. As per **claim 27**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses comprising: a television tuner **(STB 2, as discloses in col. 4, lines 9-18)**; and a transport stream bus **(bus 5)** coupled to the television tuner and the second processor, the transport stream bus enables transmission of the third stream data to the second processor without using the communication bus **(see fig. 2)**.

17. As per **claim 28**, Higashida discloses "An apparatus **(recording apparatus of fig. 2)** comprising:

a communication bus **(the communication bus between the CPU 11 and the recording/reproducing control means 7 of fig. 2)**;

a drive device **(hard disk 8 of fig. 2)**;

a video terminal **(monitor 4)**;

a first processor **(CPU 11)** coupled to the communication bus, the first processor to (i) receive a first stream data **(file management information 13)** including video data and audio data **(see col. 5, lines 45-60 and fig. 2 which discloses the CPU reading the file management information, which is an address of audio and visual data)** routed over the communication bus **(see fig. 2)**; and

a second processor **(the recording/reproducing control means 7 of fig. 2)** coupled to the drive device, the video terminal and the first processor, the second processor being provided with a second stream data **(see col. 4, lines 38-44, which discloses, "The recording/reproducing control means 7 is means which converts AV data which are outputted as an MPEG2 transport stream sent from the IEEE1394 I/F 6 into a recording format and records the data in the hard disk 8, or reads recorded AV data from the hard disk 8 and outputs the data after converting the data into an MPEG2 transport stream")** including video data and audio data that is sent from the drive device without use of the communication bus **(see col. 4, lines 38-44 and fig. 2)**, the second processor to (i) decode the second stream data for reproducing the second stream data **(see col. 4, lines 38-44, which**

discloses the recording/reproducing control means converting the data) in accordance with an instruction sent from the first processor via the communication bus **(see col. 6, lines 54-65, which also discloses, "the CPU 11 instructs the recording/reproducing control means 7 to write AV data in a continuous subsequent recording block. ..... After converting the AV data into the recording format, the recording/reproducing control means 7 writes the AV data in the next recording block. In this manner, the AV data are written in the continuous recording blocks inside the hard disk 8 one after another, while the addresses of the recording blocks in which the AV data are being written are registered in the file management information 13 one after another")** and (ii) display video signals, that are based on the decoded first stream data and transmitted by the first processor over a video bus **(bus 5)** separate from the communication bus, on the video terminal **(see col. 4, lines 38-46, which discloses outputting AV data to bus 5 and where the AV data is associated with the file management information)**.

but fails to specifically disclose a first stream data including video data and audio data and the first processor to decode a first stream of data.

Cloutier discloses a first stream data including video data and audio data **(see fig. 5)** and the first processor **(application processor 74 of fig. 5)** to decode a first stream of data **(see col. 14, lines 7-8, which discloses, "Hence, the interactive application processor 102 decodes a subset of the MPEG2 video signal for display". See also col. 6, lines 21-24, which discloses the MPEG2 also being audio).**

Higashida et al. (US pat. 6,862,401) and Cloutier et al. (US pat. 5,847,771) are analogous art because they are from the same field of endeavor of a broadcasting MPEG2 video/audio data to be display on a television monitor.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify a recording apparatus includes a recording device which records audio visual data (hereinafter referred to as "AV data") on a recording medium as taught by Higashida, and a programmable digital entertainment terminal (DET) for use in digital video program distribution networks and to systems and methods for providing picture-in-picture and picture-on-picture capabilities in digital video systems as taught by Cloutier.

The motivation for doing so would have been because Cloutier teaches, "In a preferred implementation of this apparatus, the application processor is a general purpose processor and is capable of executing different software or firmware applications in conjunction with the partial decompressing of the second stream"**(see col. 2, lines 37-41)** .

Therefore, it would have been obvious to combine Cloutier et al. (US pat. 5,847,771) with Higashida et al. (US pat. 6,862,401) for the benefit of creating the apparatus to obtain the invention as specified in claim 28.

18. As per **claim 31** the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Higashida further discloses wherein the first stream data is received from a first source and the second stream of data is received from a second source different than the first source **(see fig 2)**.

19. As per **claim 32** the combination of Higashida and Cloutier discloses "The apparatus according to claim 31," **[See rejection to claim 31 above]**, Higashida further discloses wherein the first stream data is received via a connector being different than the second source being a drive device **(see fig. 2)**.

20. As per **claim 33** the combination of Higashida and Cloutier discloses "The apparatus according to claim 28," **[See rejection to claim 28 above]**, Higashida further discloses wherein the first stream data is received from a source different than the drive device **(see fig. 2)**.

21. As per **claims 35 and 36**, the combination of Higashida and Cloutier discloses "The apparatus according to claim 1," **[See rejection to claim 1 above]**, Cloutier further discloses, "wherein the first stream data is in an encoded format when routed over the communication bus prior to the first processor decoding the first data stream **((see col. 14, lines 7-8).**

RELEVANT ART CITED BY THE EXAMINER

22. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

23. The following reference teaches an apparatus comprising; a communication bus; a drive device; a video terminal; a first and a second processor.

U.S. PATENT NUMBER

US 2004/0012718 and 6,397,327

CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

24. The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

25. Per the instant office action, claims 1-3, 18-20, and 22-36 have received a first action on the merits and are subject of a first action non-final.

DIRECTION OF FUTURE CORRESPONDENCES

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

IMPORTANT NOTE

27. If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Alford Kindred, can be reached at the following telephone number: Area Code (571) 272-4037.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or

Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see her//pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217- 91 97 (toll-free).

/Alford W. Kindred/
Supervisory Patent Examiner, Art Unit 2181
March 27, 2009

Ernest Unelus
Patent Examiner
Art Unit 2181